

Appendix B

- **Table 1. Pressure Corrections to Indicated Volume of Prover (supplied by inspector; unique to individual prover)**
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Table 1

Pressure Corrections to Indicated Volume of Prover

**(Replace this page with a copy of the pressure
correction table that was prepared for
your prover when it was calibrated.)**

Table 2. Temperature Corrections to Indicated Volume of a 100-Gallon LPG Prover

Temperature of Liquid in Prover °F	100-Gallon Correction Per °F Difference between Meter Temperature and Prover Temperature							
	Propane Specific Gravity 60/60 °F 0.500*		Propane Specific Gravity 60/60 °F 0.505*		Propane Specific Gravity 60/60 °F 0.510*		Butane Specific Gravity 60/60 °F 0.580*	
	cu in/°F	gal/°F	cu in/°F	gal/°F	cu in/°F	gal/°F	cu in/°F	gal/°F
-20 to -10	34.6	0.150	33.9	0.147	33.0	0.143	23.7**	0.103**
Over -10 to 0	35.0	0.152	34.1	0.148	33.4	0.145	24.0**	0.104**
Over 0 to 10	35.7	0.155	34.6	0.150	34.0	0.147	24.4**	0.106**
Over 10 to 20	36.4	0.158	35.7	0.154	34.7	0.150	24.4**	0.106**
Over 20 to 30	37.3	0.161	36.6	0.159	35.3	0.153	24.4**	0.106**
Over 30 to 40	37.9	0.164	37.0	0.160	35.7	0.155	24.5	0.106
Over 40 to 50	38.5	0.167	37.7	0.163	36.4	0.158	24.6	0.106
Over 50 to 70	39.3	0.170	39.3	0.170	37.0	0.160	25.4	0.110
Over 70 to 80	40.0	0.173	39.3	0.170	37.7	0.163	25.4	0.110
Over 80 to 90	41.1	0.178	39.7	0.172	38.8	0.168	25.4	0.110
Over 90 to 100	41.9	0.181	40.6	0.176	39.3	0.170	26.1	0.113
Over 100 to 110	42.6	0.184	41.3	0.179	39.8	0.172	26.2	0.113
Over 110 to 120	43.3	0.187	42.0	0.182	40.5	0.175	26.5	0.115

- Approximate specific gravities for some commercial LPG products
- ** Butane boils at 31.1 °F. Prover pressure will be less than one atmosphere below boiling point.

Note: The appropriate correction factor should be multiplied by the number of degrees difference between the meter and prover temperatures. If the temperature at the meter is *higher* than the temperature of the prover, the correction should be *added* to the prover gauge reading to compensate for the contraction of the liquid that has taken place after it was measured by the meter. If the temperature at the meter is *lower* than the temperature of the prover, the correction should be *subtracted* from the prover gauge reading to compensate for the expansion of the liquid that has taken place after it was measured by the meter.

**Table 2-A Temperature Corrections to Indicated Volume
of 100-Gallon Anhydrous Ammonia Liquid Meter Prover**

Temperature of Liquid in prover	100-gallon correction per °F difference between meter temperature and prover temperature	
°F	cubic inches/°F	gallons/°F
-20 to -10	28.0	0.121
Over -10 to 0	28.3	0.122
Over 0 to 10	28.5	0.124
Over 10 to 20	28.8	0.125
Over 20 to 30	29.0	0.126
Over 30 to 40	29.4	0.127
Over 40 to 50	29.8	0.129
Over 50 to 70	30.0	0.130
Over 70 to 80	30.4	0.132
Over 80 to 90	30.9	0.134
Over 90 to 100	31.3	0.135
Over 100 to 110	31.7	0.137
Over 110 to 120	32.2	0.139

Notes:

- The appropriate correction factor should be multiplied by the number of degrees difference between the meter and the prover temperatures.
- If the temperature at the meter is **higher** than the temperature of the prover, the correction should be **added** to the prover gauge reading to compensate for the contraction of the liquid that has taken place after the liquid was measured by the meter.
- If the temperature at the meter is **lower** than the temperature of the prover, the correction should be **subtracted** from the prover gauge reading to compensate for the expansion of the liquid that has taken place after the liquid was measured by the meter.

**Table 3: Volume Corrections for Thermal Expansion or Contraction
of a 100-gallon Low Carbon Steel LPG Prover**

Prover Temperature	Prover Correction	
°F	cubic inches	gallons
-20	-34	-0.15
-15	-32	-0.14
-10	-30	-0.13
-5	-28	-0.12
0	-26	-0.11
5	-24	-0.10
10	-21	-0.09
15	-19	-0.08
20	-17	-0.07
25	-15	-0.07
30	-13	-0.06
35	-11	-0.05
40	-9	-0.04
45	-6	-0.03
50	-4	-0.02
55	-2	-0.01
60	0	0
65	2	0.01
70	4	0.02
75	6	0.03
80	9	0.04
85	11	0.05
90	13	0.06
95	15	0.07
100	17	0.07
105	19	0.08
110	21	0.09
115	24	0.10
120	26	0.11

It should be noted that the deviations given with respect to temperature are applicable only to low carbon steel provers. For stainless steel provers the applicable coefficient of cubical expansion for the stainless steel composition used for the prover should be used to calculate the deviations.

Table 4. Volume Reduction to 60 °F for Liquefied Petroleum Gas

-50 to 50 °F.											
Observed Temperature, °F	Specific Gravity 60/60 °F.				Observed Temperature, °F.	Specific Gravity 60/60 °F.					
	0.500	0.505	0.510	0.500		0.500	0.505	0.510			
	Factor for Reducing Volume to 60 °F.					Factor for Reducing Volume to 60 °F.					
-50	1.160	4	1.156	3	1.153	0	1.092	3	1.089	1	1.088
-49	1.159	4	1.155	3	1.152	1	1.090	2	1.088	2	1.086
-48	1.157	3	1.154	4	1.150	2	1.089	2	1.187	2	1.085
-47	1.156	4	1.152	3	1.149	3	1.088	2	1.086	2	1.084
-46	1.154	3	1.151	4	1.147	4	1.086	2	1.084	2	1.082
-45	1.153	3	1.150	4	1.146	5	1.085	2	1.083	2	1.081
-44	1.152	3	1.149	4	1.145	6	1.084	2	1.082	2	1.080
-43	1.151	3	1.148	4	1.144	7	1.082	2	1.080	2	1.078
-42	1.149	3	1.146	4	1.142	8	1.081	2	1.079	2	1.077
-41	1.148	3	1.145	4	1.141	9	1.079	1	1.078	2	1.076
-40	1.147	3	1.144	4	1.140	10	1.078	2	1.076	2	1.074
-39	1.146	3	1.143	4	1.139	11	1.077	2	1.075	2	1.073
-38	1.144	3	1.141	3	1.138	12	1.075	2	1.073	2	1.071
-37	1.143	3	1.140	4	1.136	13	1.074	2	1.072	2	1.070
-36	1.141	3	1.138	3	1.135	14	1.072	1	1.071	2	1.069
-35	1.140	3	1.137	3	1.134	15	1.071	2	1.070	2	1.068
-34	1.139	3	1.136	3	1.133	16	1.070	2	1.068	2	1.066
-33	1.138	3	1.135	3	1.132	17	1.069	2	1.067	2	1.065
-32	1.136	3	1.133	3	1.130	18	1.067	1	1.066	2	1.064
-31	1.135	3	1.132	3	1.129	19	1.066	2	1.064	2	1.062
-30	1.134	3	1.131	3	1.128	20	1.064	1	1.063	2	1.061
-29	1.133	2	1.130	3	1.127	21	1.063	2	1.061	1	1.060
-28	1.131	3	1.128	3	1.125	22	1.061	1	1.060	2	1.058
-27	1.130	3	1.127	1	1.124	23	1.060	2	1.058	1	1.057
-26	1.128	3	1.125	3	1.122	24	1.058	1	1.057	2	1.055
-25	1.127	3	1.124	3	1.121	25	1.057	2	1.055	1	1.054
-24	1.126	3	1.123	3	1.120	26	1.055	1	1.054	2	1.052
-23	1.124	3	1.121	3	1.118	27	1.054	2	1.052	1	1.051
-22	1.123	3	1.120	3	1.117	28	1.052	1	1.051	2	1.049
-21	1.121	3	1.118	3	1.115	29	1.051	2	1.049	1	1.048
-20	1.120	3	1.117	3	1.114	30	1.049	1	1.048	2	1.046
-19	1.118	2	1.116	3	1.113	31	1.047	1	1.046	1	1.045
-18	1.117	3	1.114	3	1.111	32	1.046	1	1.045	2	1.043
-17	1.115	2	1.113	3	1.110	33	1.044	1	1.043	1	1.042
-16	1.114	3	1.111	3	1.108	34	1.043	2	1.041	1	1.040
-15	1.112	2	1.110	3	1.107	35	1.041	1	1.040	1	1.039
-14	1.111	2	1.109	3	1.106	36	1.039	1	1.038	1	1.037
-13	1.109	2	1.107	3	1.104	37	1.038	1	1.037	1	1.036
-12	1.108	2	1.106	3	1.103	38	1.036	1	1.035	1	1.034
-11	1.106	2	1.104	3	1.101	39	1.035	1	1.034	1	1.033
-10	1.105	2	1.103	3	1.100	40	1.033	1	1.032	1	1.031
-9	1.104	2	1.102	3	1.099	41	1.031	0	1.031	1	1.030
-8	1.102	2	1.100	2	1.098	42	1.030	1	1.029	1	1.028
-7	1.101	2	1.099	3	1.096	43	1.028	1	1.027	0	1.027
-6	1.099	2	1.097	2	1.095	44	1.027	1	1.026	1	1.025
-5	1.098	2	1.096	2	1.094	45	1.025	1	1.024	0	1.024
-4	1.097	2	1.095	2	1.093	46	1.023	0	1.023	1	1.022
-3	1.096	3	1.093	1	1.092	47	1.022	1	1.021	0	1.021
-2	1.094	2	1.092	2	1.090	48	1.020	0	1.020	1	1.019
-1	1.093	3	1.090	1	1.089	49	1.019	1	1.018	0	1.018
0	1.092	3	1.089	1	1.088	50	1.017	0	1.017	1	1.016

Data reprinted from Table 24, Volume Reduction to 60 °F, "Petroleum Measurement Tables," API Standard: 2540 (ASTM Designation 9:1250) 1952, American Edition with the permission of the American Petroleum Institute.

Table 4. Volume Reduction to 60 °F for Liquefied Petroleum Gas

Observed Temperature, °F.	Specific Gravity 60/60 °F.			Observed Temperature, °F.	50 – 140 °F.						
	0.500	0.505	0.510		0.500	0.505	0.510				
	Factor for Reducing Volume to 60 °F.				Factor for Reducing Volume to 60 °F.						
50	1.017	0	1.017	1	1.016	95	0.937	1	0.938	2	0.940
51	1.015	0	1.015	1	1.014	96	0.935	2	0.937	2	0.939
52	1.014	1	1.013	1	1.012	97	0.933	2	0.935	2	0.937
53	1.012	0	1.012	1	1.011	98	0.931	2	0.933	2	0.935
54	1.010	0	1.010	1	1.009	99	0.929	2	0.931	2	0.933
55	1.009	1	1.008	0	1.008	100	0.927	2	0.929	3	0.932
56	1.007	0	1.007	1	1.006	101	0.925	2	0.927	3	0.930
57	1.005	0	1.005	0	1.005	102	0.923	2	0.925	3	0.928
58	1.003	0	1.003	0	1.003	103	0.921	3	0.924	3	0.927
59	1.002	0	1.002	0	1.002	104	0.919	3	0.922	3	0.925
60	1.000	0	1.000	0	1.000	105	0.917	3	0.920	3	0.923
61	0.998	0	0.998	0	0.998	106	0.915	3	0.918	3	0.921
62	0.997	0	0.997	0	0.997	107	0.913	3	0.916	3	0.919
63	0.995	0	0.995	0	0.995	108	0.911	3	0.914	3	0.917
64	0.993	0	0.993	1	0.994	109	0.909	3	0.912	3	0.915
65	0.991	1	0.992	0	0.992	110	0.907	3	0.910	3	0.913
66	0.990	0	0.990	0	0.990	111	0.905	3	0.908	3	0.911
67	0.988	0	0.988	1	0.989	112	0.903	3	0.906	3	0.909
68	0.986	0	0.986	1	0.987	113	0.901	3	0.904	4	0.908
69	0.985	0	0.985	0	0.985	114	0.899	3	0.902	4	0.906
70	0.983	0	0.983	1	0.984	115	0.897	3	0.900	4	0.904
71	0.981	1	0.982	0	0.982	116	0.895	3	0.898	4	0.902
72	0.979	1	0.980	1	0.981	117	0.893	3	0.896	4	0.900
73	0.978	0	0.978	1	0.979	118	0.891	3	0.894	4	0.898
74	0.976	0	0.976	1	0.977	119	0.889	3	0.892	4	0.896
75	0.974	1	0.975	1	0.976	120	0.887	3	0.890	4	0.894
76	0.972	1	0.973	1	0.974	121	0.885	3	0.888	4	0.892
77	0.970	1	0.971	1	0.972	122	0.883	3	0.886	4	0.890
78	0.969	0	0.969	1	0.970	123	0.880	4	0.884	4	0.888
79	0.967	1	0.968	1	0.969	124	0.878	4	0.882	4	0.886
80	0.965	1	0.966	1	0.967	125	0.876	4	0.880	4	0.884
81	0.963	1	0.964	1	0.965	126	0.874	4	0.878	4	0.882
82	0.961	1	0.962	1	0.963	127	0.872	4	0.876	4	0.880
83	0.959	1	0.960	2	0.962	128	0.869	4	0.873	4	0.877
84	0.957	1	0.958	2	0.960	129	0.867	4	0.871	4	0.875
85	0.956	1	0.957	1	0.958	130	0.865	4	0.869	4	0.873
86	0.954	1	0.955	1	0.956	131	0.863	4	0.867	4	0.871
87	0.952	1	0.953	2	0.955	132	0.861	4	0.865	4	0.869
88	0.950	1	0.951	2	0.953	133	0.858	4	0.862	5	0.867
89	0.948	2	0.950	1	0.951	134	0.856	4	0.860	5	0.865
90	0.946	2	0.948	1	0.949	135	0.854	4	0.858	5	0.863
91	0.944	2	0.946	1	0.947	136	0.852	4	0.856	5	0.861
92	0.942	2	0.944	2	0.946	137	0.849	5	0.854	5	0.859
93	0.940	2	0.942	2	0.944	138	0.847	5	0.852	4	0.856
94	0.938	2	0.940	2	0.942	139	0.844	6	0.850	4	0.854
95	0.937	1	0.938	1	0.940	140	0.842	6	0.848	4	0.852

Table 4. Volume Reduction to 60 °F for Liquefied Petroleum Gas

-50 to 0 °F.

Observed Temperature °F.	Specific Gravity 60/60 °F.												
	0.570	0.575	0.580	0.585	0.590	0.595	0.600						
	Factor for Reducing Volume to 60 °F.												
-50	1.116	2	1.114	3	1.111	2	1.109	3	1.106	2	1.104	2	1.102
-49	1.115	2	1.113	3	1.110	2	1.108	3	1.105	2	1.103	2	1.101
-48	1.114	2	1.112	3	1.109	2	1.107	3	1.104	2	1.102	2	1.100
-47	1.113	2	1.111	3	1.108	3	1.105	2	1.103	2	1.101	2	1.099
-46	1.112	2	1.110	3	1.107	3	1.104	2	1.102	2	1.100	2	1.098
-45	1.111	2	1.109	3	1.106	3	1.103	2	1.101	2	1.099	2	1.097
-44	1.110	2	1.108	3	1.105	3	1.102	2	1.100	2	1.098	2	1.096
-43	1.109	2	1.107	3	1.104	3	1.101	2	1.099	2	1.097	2	1.095
-42	1.108	2	1.106	3	1.103	2	1.101	2	1.099	2	1.097	2	1.095
-41	1.107	2	1.105	3	1.102	2	1.100	2	1.098	2	1.096	2	1.094
-40	1.106	2	1.104	3	1.101	2	1.099	2	1.097	2	1.095	2	1.093
-39	1.105	2	1.103	3	1.100	2	1.098	2	1.096	2	1.094	2	1.092
-38	1.104	2	1.102	3	1.099	2	1.097	2	1.095	2	1.093	2	1.091
-37	1.103	2	1.101	3	1.098	2	1.096	2	1.094	2	1.092	2	1.090
-36	1.102	2	1.100	3	1.097	2	1.095	2	1.093	2	1.091	2	1.089
-35	1.101	2	1.099	3	1.096	2	1.094	2	1.092	2	1.090	2	1.088
-34	1.100	2	1.098	3	1.095	2	1.093	2	1.091	2	1.089	2	1.087
-33	1.099	2	1.097	3	1.094	2	1.092	2	1.090	2	1.088	2	1.086
-32	1.098	2	1.096	2	1.094	2	1.092	2	1.090	2	1.088	2	1.086
-31	1.097	2	1.095	2	1.093	2	1.091	2	1.089	2	1.087	2	1.085
-30	1.096	2	1.094	2	1.092	2	1.090	2	1.088	2	1.086	2	1.084
-29	1.095	2	1.093	2	1.091	2	1.089	2	1.087	2	1.085	2	1.083
-28	1.094	2	1.092	2	1.090	2	1.088	2	1.086	2	1.084	2	1.082
-27	1.093	2	1.091	2	1.089	2	1.087	2	1.085	1	1.084	2	1.082
-26	1.092	2	1.090	2	1.088	2	1.086	2	1.084	1	1.083	2	1.081
-25	1.091	2	1.089	2	1.087	2	1.085	2	1.083	1	1.082	2	1.080
-24	1.090	2	1.088	2	1.086	2	1.084	2	1.082	1	1.081	2	1.079
-23	1.089	2	1.087	2	1.085	2	1.083	2	1.081	1	1.080	2	1.078
-22	1.088	2	1.086	2	1.084	2	1.082	1	1.081	2	1.079	1	1.078
-21	1.087	2	1.085	2	1.083	2	1.081	1	1.080	2	1.078	1	1.077
-20	1.086	2	1.084	2	1.082	2	1.080	1	1.079	2	1.077	1	1.076
-19	1.085	2	1.083	2	1.081	2	1.079	1	1.078	2	1.076	1	1.075
-18	1.084	2	1.082	2	1.080	2	1.078	1	1.077	2	1.075	1	1.074
-17	1.082	1	1.081	2	1.079	2	1.077	1	1.076	1	1.075	2	1.073
-16	1.081	1	1.080	2	1.078	2	1.076	1	1.075	1	1.074	2	1.072
-15	1.080	1	1.079	2	1.077	2	1.075	1	1.074	1	1.073	2	1.071
-14	1.079	1	1.078	2	1.076	2	1.074	1	1.073	1	1.072	2	1.070
-13	1.078	1	1.077	2	1.075	2	1.073	1	1.072	1	1.071	2	1.069
-12	1.077	1	1.076	2	1.074	1	1.073	2	1.071	1	1.070	2	1.068
-11	1.076	1	1.075	2	1.073	1	1.072	2	1.070	1	1.069	2	1.067
-10	1.075	1	1.074	2	1.072	1	1.071	2	1.069	1	1.068	2	1.066
-9	1.074	1	1.073	2	1.071	1	1.070	2	1.068	1	1.067	2	1.065
-8	1.073	1	1.072	2	1.070	1	1.069	2	1.067	1	1.066	2	1.064
-7	1.072	1	1.071	2	1.069	1	1.068	1	1.067	2	1.065	2	1.063
-6	1.071	1	1.070	2	1.068	1	1.067	1	1.066	2	1.064	2	1.062
-5	1.070	1	1.069	2	1.067	1	1.066	1	1.065	2	1.063	2	1.061
-4	1.069	1	1.068	2	1.066	1	1.065	1	1.064	2	1.062	2	1.060
-3	1.068	1	1.067	2	1.065	1	1.064	1	1.063	2	1.061	2	1.059
-2	1.068	2	1.066	1	1.065	1	1.064	1	1.063	2	1.061	2	1.059
-1	1.067	2	1.065	1	1.064	1	1.063	1	1.062	2	1.060	2	1.058
0	1.066	2	1.064	1	1.063	1	1.062	1	1.061	2	1.059	2	1.057

Table 4. Volume Reduction to 60 °F for Liquefied Petroleum Gas

Observed Temperature °F.	Specific Gravity 60/60 °F.										0 to 50 °F.		
	0.570	0.575	0.580	0.585	0.590	0.595	0.600	Factor for Reducing Volume to 60 °F.					
0	1.066	2	1.064	1	1.063	1	1.062	1	1.061	2	1.059	2	1.057
1	1.065	2	1.063	1	1.062	1	1.061	1	1.060	2	1.058	2	1.056
2	1.064	2	1.062	1	1.061	1	1.060	1	1.059	2	1.057	2	1.055
3	1.063	2	1.061	1	1.060	1	1.059	1	1.058	2	1.056	2	1.054
4	1.062	2	1.060	1	1.059	1	1.058	1	1.057	2	1.055	1	1.054
5	1.061	2	1.059	1	1.058	1	1.057	2	1.055	1	1.054	1	1.053
6	1.059	1	1.058	1	1.057	2	1.055	1	1.054	1	1.053	1	1.052
7	1.058	1	1.057	1	1.056	2	1.054	1	1.053	1	1.052	1	1.051
8	1.057	1	1.056	1	1.055	2	1.053	1	1.052	1	1.051	1	1.050
9	1.056	1	1.055	1	1.054	2	1.052	1	1.051	1	1.050	1	1.049
10	1.055	1	1.054	1	1.053	2	1.051	1	1.050	1	1.049	1	1.048
11	1.054	1	1.053	1	1.052	2	1.050	1	1.049	1	1.048	1	1.047
12	1.053	1	1.052	1	1.051	2	1.049	1	1.048	1	1.047	1	1.046
13	1.052	1	1.051	1	1.050	2	1.048	1	1.047	1	1.046	1	1.045
14	1.051	1	1.050	1	1.049	2	1.047	1	1.046	1	1.045	1	1.044
15	1.050	2	1.048	1	1.047	1	1.046	1	1.045	1	1.044	1	1.043
16	1.048	1	1.047	1	1.046	1	1.045	1	1.044	1	1.043	1	1.042
17	1.047	1	1.046	1	1.045	1	1.044	1	1.043	1	1.042	1	1.041
18	1.046	1	1.045	1	1.044	1	1.043	1	1.042	1	1.041	1	1.040
19	1.045	1	1.044	1	1.043	1	1.042	1	1.041	1	1.040	1	1.039
20	1.044	1	1.043	1	1.042	1	1.041	1	1.040	1	1.039	1	1.038
21	1.043	1	1.042	1	1.041	1	1.040	1	1.039	1	1.038	1	1.037
22	1.042	1	1.041	1	1.040	1	1.039	1	1.038	1	1.037	0	1.037
23	1.041	1	1.040	1	1.039	1	1.038	1	1.037	1	1.036	0	1.036
24	1.040	1	1.039	1	1.038	1	1.037	1	1.036	1	1.035	0	1.035
25	1.039	1	1.038	1	1.037	1	1.036	1	1.035	0	1.035	1	1.034
26	1.037	0	1.037	1	1.036	1	1.035	1	1.034	0	1.034	1	1.033
27	1.036	0	1.036	1	1.035	1	1.034	1	1.033	0	1.033	1	1.032
28	1.035	0	1.035	1	1.034	1	1.033	1	1.032	0	1.032	1	1.031
29	1.034	0	1.034	1	1.033	1	1.032	1	1.031	0	1.031	1	1.030
30	1.033	0	1.033	1	1.032	1	1.031	1	1.030	0	1.030	1	1.029
31	1.032	1	1.031	0	1.031	1	1.030	1	1.029	0	1.029	1	1.028
32	1.031	1	1.030	0	1.030	1	1.029	1	1.028	0	1.028	1	1.027
33	1.030	1	1.029	0	1.029	1	1.028	1	1.027	0	1.027	1	1.026
34	1.029	1	1.028	0	1.028	1	1.027	1	1.026	0	1.026	1	1.025
35	1.028	1	1.027	0	1.027	1	1.026	1	1.025	0	1.025	1	1.024
36	1.027	1	1.026	1	1.025	0	1.025	1	1.024	0	1.024	1	1.023
37	1.026	1	1.025	1	1.024	0	1.024	1	1.023	0	1.023	1	1.022
38	1.025	1	1.024	1	1.023	0	1.023	1	1.022	0	1.022	1	1.021
39	1.024	1	1.023	1	1.022	0	1.022	1	1.021	0	1.021	1	1.020
40	1.023	1	1.022	1	1.021	0	1.021	1	1.020	0	1.020	1	1.019
41	1.022	1	1.021	1	1.020	0	1.020	1	1.019	0	1.019	1	1.018
42	1.021	1	1.020	1	1.019	0	1.019	1	1.018	0	1.018	1	1.017
43	1.019	0	1.019	1	1.018	0	1.018	1	1.017	0	1.017	1	1.016
44	1.018	0	1.018	1	1.017	0	1.017	1	1.016	0	1.016	1	1.015
45	1.017	0	1.017	1	1.016	0	1.016	1	1.015	0	1.015	0	1.015
46	1.016	1	1.015	0	1.015	0	1.015	1	1.014	0	1.014	0	1.014
47	1.015	1	1.014	0	1.014	0	1.014	1	1.013	0	1.013	0	1.013
48	1.013	0	1.013	0	1.013	0	1.013	1	1.012	0	1.012	0	1.012
49	1.012	0	1.012	0	1.012	0	1.012	1	1.011	0	1.011	0	1.011
50	1.011	0	1.011	0	1.011	0	1.011	1	1.010	0	1.010	0	1.010

Table 4. Volume Reduction to 60 °F for Liquefied Petroleum Gas

50 – 100 °F

Observed Tempera- ture °F.	Specific Gravity 60/60 °F.												
	0.570	0.575	0.580	0.585	0.590	0.595	0.600						
	Factor for Reducing Volume to 60 °F.												
50	1.011	0	1.011	0	1.011	0	1.011	1	1.010	0	1.010	0	1.010
51	1.010	0	1.010	0	1.010	0	1.010	1	1.009	0	1.009	0	1.009
52	1.009	0	1.009	0	1.009	0	1.009	1	1.008	0	1.008	0	1.008
53	1.008	0	1.008	0	1.008	1	1.007	0	1.007	0	1.007	02	1.007
54	1.007	0	1.007	0	1.007	1	1.006	0	1.006	0	1.006	0	1.006
55	1.006	0	1.006	0	1.006	1	1.005	0	1.005	0	1.005	0	1.005
56	1.005	1	1.004	0	1.004	0	1.004	0	1.004	0	1.004	0	1.004
57	1.003	0	1.003	0	1.003	0	1.003	0	1.003	0	1.003	0	1.003
58	1.002	0	1.002	0	1.002	0	1.002	0	1.002	0	1.002	0	1.002
59	1.001	0	1.001	0	1.001	0	1.001	0	1.001	0	1.001	0	1.001
60	1.000	0	1.000	0	1.000	0	1.000	0	1.000	0	1.000	0	1.000
61	0.999	0	0.999	0	0.999	0	0.999	0	0.999	0	0.999	0	0.999
62	0.998	0	0.998	0	0.998	0	0.998	0	0.998	0	0.998	0	0.998
63	0.997	0	0.997	0	0.997	0	0.997	0	0.997	0	0.997	0	0.997
64	0.995	0	0.995	1	0.996	0	0.996	0	0.996	0	0.996	0	0.996
65	0.994	0	0.994	0	0.994	1	0.995	0	0.995	0	0.995	0	0.995
66	0.993	0	0.993	0	0.993	0	0.993	0	0.993	1	0.994	0	0.994
67	0.992	0	0.992	0	0.992	0	0.992	0	0.992	1	0.993	0	0.993
68	0.990	1	0.991	0	0.991	0	0.991	0	0.991	1	0.992	0	0.992
69	0.989	1	0.990	0	0.990	0	0.990	0	0.990	1	0.991	0	0.991
70	0.988	0	0.988	1	0.989	0	0.989	0	0.989	1	0.990	0	0.990
71	0.987	0	0.987	1	0.988	0	0.988	0	0.988	1	0.989	0	0.989
72	0.986	0	0.986	1	0.987	0	0.987	0	0.987	1	0.988	0	0.988
73	0.985	0	0.985	1	0.986	0	0.986	0	0.986	1	0.987	0	0.987
74	0.984	0	0.984	1	0.985	0	0.985	0	0.985	1	0.986	0	0.986
75	0.983	0	0.983	0	0.983	1	0.984	0	0.984	1	0.985	0	0.985
76	0.981	1	0.982	0	0.982	1	0.983	0	0.983	1	0.984	0	0.984
77	0.980	1	0.981	0	0.981	0	0.981	1	0.982	1	0.983	0	0.983
78	0.979	0	0.979	1	0.980	0	0.980	1	0.981	1	0.982	0	0.982
79	0.978	0	0.978	1	0.979	0	0.979	1	0.980	1	0.981	0	0.981
80	0.977	0	0.977	1	0.978	0	0.978	1	0.979	1	0.980	1	0.981
81	0.975	1	0.976	1	0.977	0	0.977	1	0.978	1	0.979	1	0.980
82	0.974	1	0.975	1	0.976	0	0.976	1	0.977	1	0.978	1	0.979
83	0.973	0	0.974	1	0.975	0	0.975	1	0.976	1	0.977	1	0.978
84	0.972	0	0.973	1	0.974	0	0.974	1	0.975	1	0.976	1	0.977
85	0.971	0	0.971	1	0.972	1	0.973	1	0.974	1	0.975	1	0.976
86	0.969	1	0.970	1	0.971	1	0.972	1	0.973	1	0.974	1	0.975
87	0.968	1	0.969	1	0.970	1	0.971	1	0.972	1	0.973	1	0.974
88	0.067	1	0.968	1	0.969	1	0.970	1	0.971	1	0.972	1	0.973
89	0.966	1	0.967	1	0.968	1	0.969	1	0.970	1	0.971	1	0.972
90	0.964	2	0.966	1	0.967	0	0.967	1	0.968	2	0.970	1	0.971
91	0.963	1	0.964	1	0.965	1	0.966	1	0.967	2	0.969	1	0.970
92	0.962	1	0.963	1	0.964	1	0.965	1	0.966	2	0.968	1	0.969
93	0.961	1	0.962	1	0.963	1	0.964	1	0.965	2	0.967	1	0.968
94	0.959	2	0.961	1	0.962	1	0.963	1	0.964	2	0.966	1	0.967
95	0.958	1	0.959	2	0.961	1	0.962	1	0.963	2	0.965	1	0.966
96	0.957	1	0.958	1	0.959	1	0.960	2	0.962	2	0.964	1	0.965
97	0.956	1	0.957	1	0.958	1	0.959	2	0.961	2	0.963	1	0.964
98	0.954	2	0.956	1	0.957	1	0.958	2	0.960	2	0.962	1	0.963
99	0.953	2	0.955	1	0.956	1	0.957	2	0.959	2	0.961	1	0.962
100	0.952	1	0.953	1	0.954	2	0.956	2	0.958	1	0.859	2	0.961

Table 4. Volume Reduction to 60 °F for Liquefied Petroleum Gas

Observed Tempera- ture °F.	Specific Gravity 60/60 °F.										100 – 140 °F.		
	0.570	0.575	0.580	0.585	0.590	0.595	0.600						
	Factor for Reducing Volume to 60 °F.												
100	0.952	1	0.953	1	0.954	2	0.956	2	0.958	1	0.959	2	0.961
101	0.951	1	0.952	1	0.953	2	0.955	2	0.957	1	0.958	2	0.960
102	0.950	1	0.951	1	0.952	2	0.954	2	0.956	1	0.957	2	0.959
103	0.948	1	0.949	2	0.951	1	0.952	2	0.954	2	0.056	2	0.958
104	0.947	1	0.948	2	0.950	1	0.951	2	0.953	2	0.955	2	0.957
105	0.946	1	0.947	2	0.949	1	0.950	2	0.952	2	0.954	2	0.956
106	0.945	1	0.946	2	0.948	1	0.949	2	0.951	2	0.953	2	0.955
107	0.943	2	0.945	2	0.947	1	0.948	2	0.950	2	0.952	2	0.954
108	0.942	1	0.943	2	0.945	2	0.947	2	0.949	2	0.951	2	0.953
109	0.940	2	0.942	2	0.944	2	0.946	2	0.948	2	0.950	2	0.952
110	0.939	2	0.941	2	0.943	2	0.945	2	0.947	2	0.949	2	0.951
111	0.938	2	0.940	2	0.942	2	0.944	2	0.946	2	0.948	2	0.950
112	0.937	2	0.939	2	0.941	2	0.943	2	0.945	2	0.947	2	0.949
113	0.935	2	0.937	2	0.939	2	0.941	2	0.943	3	0.946	2	0.948
114	0.934	2	0.936	2	0.938	2	0.940	2	0.942	3	0.945	2	0.947
115	0.933	2	0.935	2	0.937	2	0.939	2	0.941	3	0.944	2	0.946
116	0.932	2	0.934	2	0.936	2	0.938	2	0.940	3	0.943	2	0.945
117	0.931	2	0.933	2	0.935	2	0.937	2	0.939	3	0.942	2	0.944
118	0.929	2	0.931	2	0.933	2	0.935	3	0.938	2	0.940	3	0.943
119	0.928	2	0.930	2	0.932	2	0.934	3	0.937	2	0.939	3	0.942
120	0.927	2	0.929	2	0.931	2	0.933	3	0.936	2	0.938	3	0.941
121	0.926	2	0.928	2	0.930	2	0.932	3	0.935	2	0.937	3	0.940
122	0.924	3	0.927	2	0.929	2	0.931	3	0.934	2	0.936	3	0.939
123	0.923	2	0.925	2	0.927	2	0.929	3	0.932	3	0.935	3	0.938
124	0.921	3	0.924	2	0.926	2	0.928	3	0.931	3	0.934	3	0.937
125	0.920	3	0.923	2	0.925	2	0.927	3	0.930	3	0.933	3	0.936
126	0.919	3	0.922	2	0.924	2	0.926	3	0.929	3	0.932	3	0.935
127	0.917	3	0.920	2	0.922	3	0.925	3	0.928	3	0.931	3	0.934
128	0.916	3	0.919	2	0.921	2	0.923	3	0.926	4	0.930	3	0.933
129	0.914	3	0.917	2	0.919	3	0.922	3	0.925	4	0.929	3	0.932
130	0.913	3	0.916	2	0.918	3	0.921	3	0.924	4	0.928	3	0.931
131	0.912	3	0.915	2	0.917	3	0.920	3	0.923	4	0.927	3	0.930
132	0.911	2	0.913	3	0.916	2	0.918	4	0.922	4	0.926	3	0.929
133	0.909	3	0.912	2	0.914	3	0.917	3	0.920	5	0.925	3	0.928
134	0.908	2	0.910	3	0.913	2	0.915	4	0.919	5	0.924	3	0.927
135	0.907	2	0.909	3	0.912	2	0.914	4	0.918	5	0.923	3	0.926
136	0.906	2	0.908	3	0.911	2	0.913	4	0.917	5	0.922	3	0.925
137	0.904	3	0.907	2	0.909	3	0.912	4	0.916	5	0.921	3	0.924
138	0.903	2	0.905	3	0.908	2	0.910	4	0.914	5	0.919	4	0.923
139	0.901	3	0.904	2	0.906	3	0.909	4	0.913	5	0.918	4	0.922
140	0.900	3	0.903	2	0.905	3	0.908	4	0.912	5	0.917	4	0.921

Table 4A. Properties of Saturated Liquid Ammonia at Various Temperatures

Temperature °F	Vapor Pressure (psig) ¹	Liquid Density		Volume Correction to 60 °F ²
		Pounds per Cubic Foot ¹	Pounds per U.S. Gallon ²	
-28	0.0	42.57	5.961	1.1057
-25	1.3	42.44	5.673	1.1023
-20	3.6	42.22	5.644	1.0966
-15	6.2	42.00	5.615	1.0909
-10	9.0	41.78	5.585	1.0852
-5	12.2	41.56	5.556	1.0795
0	15.7	41.34	5.526	1.0738
5	19.6	41.11	5.496	1.0678
10	23.8	40.89	5.466	1.0621
15	28.4	40.66	5.435	1.0561
20	33.5	40.43	5.405	1.0501
25	39.0	40.20	5.374	1.0442
30	45.0	39.96	5.342	1.0379
35	51.6	39.72	5.310	1.0317
40	58.6	39.49	5.279	1.0257
45	66.3	39.24	5.246	1.0192
50	74.5	39.00	5.214	1.0130
55	83.4	38.75	5.180	1.0065
60	92.9	38.50	5.147	1.0000
65	103.1	38.25	5.113	0.9935
70	114.1	38.00	5.080	0.9870
75	125.8	37.74	5.045	0.9803
80	138.3	37.48	5.010	0.9735
85	151.7	37.21	4.974	0.9665
90	165.9	36.95	4.939	0.9597
95	181.1	36.67	4.902	0.9525
100	197.2	36.40	4.866	0.9455
105	214.2	36.12	4.829	0.9382
110	232.3	35.84	4.791	0.9309
115	251.5	35.55	4.752	0.9234
120	271.7	35.26	4.714	0.9158
125	293.1	34.96	4.673	0.9081
130	315.6	34.66	4.633	0.9003
135	339.4	34.35	4.592	0.8922
140	364.4	34.04	4.550	0.8842

¹ Data from Nat'l Bureau of Stds Circular No. 142; ² Values calculated from liquid density in lb/cubic foot.

List of Suggested Fittings for an LPG Prover For Connecting to Non-Standard Supply Tanks

1. 1-3/4" Female Acme x 1-1/4" H.D. Male Evertite
2. 1-3/4" Female Acme x 2" H.D. Male Evertite
3. 1-1/4" Female Acme x 1-3/4" Male Acme
4. 1-3/4" Male Acme x 3/4" H.D. Female Evertite
5. 1-3/4" Male Acme x 1" H.D. Female Evertite
6. 1-3/4" Male Acme x 2-1/4" Female Acme
7. 1-3/4" Male Acme x 1-1/2" Female Evertite
8. 1-3/4" Male Acme x 2" H.D. Female Evertite
9. 1-3/4" Female Acme x 1-1/4" Male Acme
10. 3" Female Acme x 1-1/4" Male Acme